

U.S. Serial No. 10/067,260  
Attorney Docket No. 48599-00338  
Amendment under 37 C.F.R. §1.312

**IN THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claims 1 through 7 (cancelled)

8. (original) A planarization method using anisotropic wet etching, which can be applied on a substrate having a first insulating layer thereon, the first insulating layer having large trenches and small trenches therein, comprising:

conformably forming a second insulating layer on the first insulating layer, a thickness of the second insulating layer is about the same as a depth of the large and the small trenches;

patterning the second insulating layer to form protrusions in the large trenches, a distance between the neighboring protrusions is about the same as the width of the small trenches;

mixing  $\text{H}_2\text{SO}_4$ ,  $\text{H}_3\text{PO}_4$ , HF and  $\text{H}_2\text{O}$  to form an etching solution; and

placing the substrate into the etching solution to make the etching solution pass the surface of the first and the second insulating layer at a flow rate to etch the first and the second insulating layer.

9. (original) The planarization method of claim 8, wherein the concentration of the  $\text{H}_2\text{SO}_4$  is about 98% by weight.

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10. (original) The planarization method of claim 8, wherein the concentration of the  $\text{H}_3\text{PO}_4$  is about 85% by weight.

11. (original) The planarization method of claim 8, wherein the concentration of the HF is about 1% by weight.

12. (original) The planarization method of claim 8, wherein the volume ratio of  $\text{H}_2\text{SO}_4$  and  $\text{H}_3\text{PO}_4$  : HF is about 50 – 100 : 1.

13. (original) The planarization method of claim 8, wherein the etching rate of the etching solution to an insulating layer with a planar surface is about 50 – 80 Å/min.

14. (original) The planarization method of claim 8, wherein the first insulating layer is a silicon oxide layer.

15. (original) The planarization method of claim 8, wherein the second insulating layer is a silicon oxide layer.

16. (original) A planarization method using anisotropic wet etching, which can be applied on a substrate having an insulating layer thereon, the insulating layer having large trenches and small trenches therein, comprising:

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using an insulating material to form protrusions in the large trenches, wherein a distance between the neighboring protrusions is about the same as the width of the small trenches and a thickness of the protrusions is about the same as a depth of the large and the small trenches;

mixing  $\text{H}_2\text{SO}_4$ ,  $\text{H}_3\text{PO}_4$ , HF and  $\text{H}_2\text{O}$  to form an etching solution; and

placing the substrate into the etching solution to make the etching solution pass the surface of the insulating layer and the protrusions at a flow rate to etch the insulating layer and the protrusions.

17. (original) The planarization method of claim 16, wherein the concentration of the  $\text{H}_2\text{SO}_4$  is about 98% by weight.

18. (original) The planarization method of claim 16, wherein the concentration of the  $\text{H}_3\text{PO}_4$  is about 85% by weight.

19. (original) The planarization method of claim 16, wherein the concentration of the HF is about 1% by weight.

20. (original) The planarization method of claim 16, wherein the volume ratio of  $\text{H}_2\text{SO}_4$  and  $\text{H}_3\text{PO}_4$  : HF is about 50 – 100 : 1.

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21. (original) The planarization method of claim 16, wherein the etching rate of the etching solution to an insulating layer with a planar surface is about 50 – 80 Å/min.